Note to File # (newrk.736) [Harvey-PB]
19Sept07
Newark Area 3 and 4/Sobrato, Newark, Ca

8 and 14 Aug I reviewed proposed jurisdictional delineation for Newark Areas 3 and 4 with Pat Bousier (Harvey). The project study boundary consists of two separated parcels. Area 3 is an 80 +/- acre agricultural field off Cherry St/Stevensen Blvd. Area 4 is a complex of agricultural fields and drainages comprising 550+/- acres S of Mowery Ave and W of SP RR tracks.

Area 3(Field A) is currently disced and planted to agricultural grasses. Areas bounding this parcel have been developed with the perimeter of the field to the E and S landscaped and irrigated. The perimeter is drained by roadside storm sewers and has landscape berms to the E and S to restrict surface water from flowing onto the property. The field is relatively flat with a 1% +/- slope from E to W. SP1 and SP2 are problem sites with disturbed vegetation, soil and hydrology. Based on observed plant and soil conditions with hydrology information from jd study, it appears unlikely the area currently meets criteria for wetlands. OP's 1, 2, 5 and 6 identify upland conditions within ag field. OP 3 identifies a 30+/- foot wide zone on S boundary with saturated soils and wetland plant community. The hydrologic source of the wetland was observed to be artificial caused by leaking irrigation pipes associated with the recently constructed bermed landscape at the edge of the property. The small area of wetlands in Area 3 is artificial and should not be considered jurisdictional. A cement line drainage ditch, OP 4 and 6, runs along the W edge of the site and removed surface water that sheet flow over the uplands in the agricultural field.

Area 4 (Fields B thru H) is mostly a series of agricultural fields dissected by a number of flood control and drainage channels. A small area in the NW corner of the Area is an auto wrecking yard (Field B). The auto wrecking yard is built on 3 to 4 feet of fill, has no wetlands within the facility and appears to be decades old. Within Area B, there is an excavated detention pond collecting surface water draining the auto wrecking facility and a constructed ditch at the edge of the wrecking yard. Theses features are not jurisdictional and have been identified on the proposed map. A small area in the EC portion (Field E) is fallow and mostly filled with variable topography and some wetlands in low spots between piles of fill (SP7). The remaining portion of Area 4 (Fields C, D, F, G and H) is annually disced and planted with agricultural grasses including Lolium and Avena. Typically, wetter portions of the agricultural fields have volunteer wetland species that dominate the plant community. Numerous areas within the ag fields have suppressed vegetation from prolonged standing water and had little to no vegetative cover. See Field Map 8/14Aug07 for location of SP's, OP's and field designations.

A small area of wetlands was added to Field C. There was a recoverable watertable and obvious shift to wetter end plants from SP 5 toward SP 3. The watertable receded below jurisdictional depths with shifts to Fac and Upl plants between SP 5 and SP 4. The observed watertable coincided with a topographic change. Typha tubers and rhizomes were scattered over the surface of the wetter end and indicates a perennial shallow watertable within portions of this field. The remainder of the field had observable shifts in the plant community across the proposed boundary.

Field D is a large area with much of the W portion with standing water and dense obligate vegetation stands. The vegetation and groundwater grade into uplands up the topographic slope toward the E. We recovered a watertable at 14inches along the proposed wetland boundary and at 20 inches 75 feet upslope of the boundary. SP 6 is representative of the soil, vegetation and hydrology at the boundary of the proposed wetland. There appears to be artesian water rising to the surface within the ponded area with enough volume to sustain a persistent flow discharge off the field into a drainage channel in the SW corner of the field. There were no changes made to the proposed map within this field. Proposed SP's 50,51 and 52 represents a convex area of fill with an abrupt boundary.

Area E is a relatively small area that has various piles of fill scattered across most of the surface. Some portions are level while others are mounds. Relative depressions have been created by the fill and have ponded areas characterized by SP 7. Typically these areas have surface hydrologic connections to a drainage channel ultimately connecting to the major drainage channels. Upland/wetland boundaries are typically abrupt.

Area F is a large area on the S with large areas of bare ground caused by prolonged flooding. A few higher areas have upland plants characterized by SP 9 and are probably the result of historic fill from deposition of drainage channel dredging. No changes made to this area.

Area G is a large field with the N portions relatively higher with Beta and grass stubble. Lower portions appear to not have been disced and are mostly bare ground probably associated with prolonged seasonal ponding. Large areas adjacent to the major drainage ditch have been raised by deposition of fill or have access to drainage. Two areas connecting large wetland areas to the major drainage ditch were added to the proposed map.

Area H is similar to F. SP 10 characterizes the areas that have been added to these areas. Large areas within these portions have bare ground from prolonged ponding. Higher ground adjacent to major drainage ditch is probably the result of fill deposition and may also have access to better drainage.

The proposed delineation covers a large area with various levels of management. The entire site can be considered a problem site. Delineation material supplied by the applicant allows a better understanding of the hydrologic situation and the two seasons of hydrology monitoring helps interpret site conditions. General low topographic position of the ag fields S of the RR tracks results in lack of drainage and artesian sub-surface water conditions that result in high water tables year round.

Recommendation: Revised map dated Aug07 include the recommended changes from the field review. Proposed revision represents reasonable interpretation of wetland criteria and can be verified. All wetlands and drainage channels are adjacent to TNW's and are jurisdictional.